

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the above-referenced application.

Listing of Claims:

1. (Currently amended) A surface mount crystal unit, comprising:

a substrate for surface-mounting;

a pair of connecting electrodes disposed on a principal surface of said substrate;

a crystal blank having excitation electrodes and extension electrodes extending from said excitation electrodes to respective opposite sides of an end of said crystal blank, said opposite sides being fixed to said connecting electrodes by an electrically conductive adhesive; and

a ridge corresponding to said end of the crystal blank and disposed on said substrate in spaced relation to said connecting electrodes, said ridge having a height greater than a thickness of said connecting electrodes, wherein at least an outer portion of said ridge is an insulating material having a high bonding strength with respect to said electrically conductive adhesive;

said electrically conductive adhesive being applied to said connecting electrodes, a spacing between said connecting electrodes and said ridge, and an upper surface of said ridge, wherein said electrically conductive adhesive is joined to said principal surface of the substrate at said spacing between said connecting electrodes and said ridge;

said crystal blank having an opposite end which remains lifted about said ridge from said principal surface of said substrate under shrinking forces of said electrically conductive adhesive.

2. (Previously presented) The surface mount crystal unit according to claim 1, wherein said ridge is made entirely of an insulating material.
3. (Original) The surface mount crystal unit according to claim 2, wherein said substrate and said ridge are made of ceramics.
4. (Original) The surface mount crystal unit according to claim 1, further comprising a frame wall laminated on said substrate and having an opening, said substrate and said frame wall jointly defining a recess, said crystal blank being accommodated in said recess.
5. (Original) The surface mount crystal unit according to claim 1, wherein said ridge comprises a pair of ridges associated respectively with said connecting electrodes.
6. (Original) The surface mount crystal unit according to claim 1, wherein said ridge comprises a common ridge shared by said connecting electrodes.

7. (Previously presented) A surface mount crystal unit comprising:

a substrate for surface-mounting;

a pair of connecting electrodes disposed on a principal surface of said substrate;

a crystal blank having excitation electrodes and extension electrodes extending from said excitation electrodes to respective opposite sides of an end of said crystal blank, said opposite sides being fixed to said connecting electrodes by an electrically conductive adhesive; and

a ridge corresponding to said end of the crystal blank and disposed on said substrate in contact with said connecting electrodes, said ridge having a height greater than the thickness of said connecting electrodes and being made of an insulating material;

said electrically conductive adhesive being applied to said connecting electrodes and an upper surface of said ridge;

said crystal blank having an opposite end which remains lifted about said ridge from said principal surface of said substrate under shrinking forces of said electrically conductive adhesive.

8. (Original) The surface mount crystal unit according to claim 7, wherein said substrate and said ridge are made of ceramics.

9. (Currently amended) A casing for surface mount crystal unit, comprising:

a substrate for surface-mounting a crystal blank;

a frame wall laminated on said substrate and having an opening, wherein said substrate and said frame wall jointly defining a recess for accepting ~~[[a]]~~ the crystal blank~~[[.]]~~;

a pair of connecting electrodes disposed on a principal surface of said substrate;
and

a ridge corresponding to an end of said opening, said ridge being disposed on said substrate in spaced relation to said connecting electrodes and having a height greater than a thickness of said connecting electrodes, wherein at least an outer portion of said ridge is an insulating material having a high bonding strength with respect to an electrically conductive adhesive, and wherein said electrically conductive adhesive is joined to said principal surface of the substrate at a spacing between said connecting electrodes and said ridge.

10. (Previously presented) The casing according to claim 9, wherein said ridge is made entirely of an insulating material.

11. (Previously presented) The casing according to claim 10, wherein said ridge is made of a ceramic material.

12. (Previously presented) The casing according to claim 10, wherein said substrate and said ridge are made of ceramic materials.

13. (Previously presented) The casing according to claim 9, wherein said ridge comprises a pair of ridges associated respectively with said connecting electrodes.

14. (Previously presented) The casing according to claim 9, wherein said ridge comprises a common ridge shared by said connecting electrodes.